

## DOCUMENT RESUME

ED 137 455

UD 016 828

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TITLE Corrective Reading Services in Nonpublic Schools,  
ESEA Title I 1974-1975.  
INSTITUTION New York City Board of Education, Brooklyn, N.Y.  
Office of Educational Evaluation.  
PUB DATE 75  
NOTE 38p.; New York City Board of Education Function No.  
09-59626  
EDRS PRICE MF-\$0.83 HC-\$2.06 Plus Postage.  
DESCRIPTORS \*Corrective Reading; Elementary Secondary Education;  
\*Nonpublic School Aid; Program Evaluation; \*Reading  
Ability; \*Reading Achievement; \*Reading Development;  
Reading Improvement  
IDENTIFIERS Elementary Secondary Education Act Title I; ESEA  
Title I; \*New York (New York)

## ABSTRACT

This document presents a description and evaluation of the Corrective Reading Services Program designed to serve approximately 13,769 eligible, educationally deprived pupils in 229 nonpublic schools of New York City during the 1974-1975 school year. The purpose of the program was to improve the reading level of the students through a corrective reading component designed to supplement the regular reading program of the schools served. Students in the program had to meet the dual eligibility criteria of residence in a target area and a level of educational achievement below minimum grade level competency. Emphasis in the selection process was placed on students between grades one and six, although students above that level who showed significant retardation were given service. Instructional time varied from one school to another. Classes ranged in length from 45 to 60 minutes. The instructional methods used by each teacher varied, but they were geared to meeting the needs of individual students. The evaluation had two aims: to determine if the implementation of the program had been conducted in accordance with the proposal guidelines and to determine if there was a statistically significant increase in pupil reading achievement for the 1974-1975 period, as measured by standardized tests. In terms of implementation, it was found that the program and the proposal guidelines coincided. In terms of pupil achievement, it was found that achievement in reading was outstanding, on the whole, the only exception being grades 10 and 12. (Author/AM)

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ED137455

EVALUATION REPORT

Function No. 09-59626

CORRECTIVE READING SERVICES  
IN NONPUBLIC SCHOOLS ESEA TITLE I  
1974-1975

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016828  
An evaluation of a New York City School district educational project funded under Title I of the Elementary and Secondary Education Act of 1965 (PL 89-10) performed for the Board of Education of the City of New York for the 1974-75 school year

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Corrective Reading Services  
in Nonpublic Schools ESEA Title I

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## Chapter I

### THE PROGRAM

The Corrective Reading Services program was a component within the umbrella program entitled, "ESEA Title I Nonpublic School Programs," (Function #09-59625). The Corrective Reading Services component was designed to serve approximately 13,769 eligible, educationally deprived pupils in 229 schools of New York City during the 1974-1975 school year. The purpose of the program was to improve the reading level of the students through a corrective reading component designed to supplement the regular reading program of the schools served. The program was recycled from the previous year.

The term 'nonpublic schools' included schools of a number of religious denominations, among them, Roman Catholic, Hebrew, Lutheran, Greek Orthodox, Episcopal, Ukrainian, Society of Friends, and Seventh Day Adventist. While the program allowed for the inclusion of non-denominational schools, there were none participating in the program during the current school year.

Personnel involved in the program included: one coordinator, one assistant to the coordinator, seven field supervisors, 241 teachers, one school secretary, one senior stenographer, and two typists.

Daily programs of the teachers consisted of six hours and twenty minutes at the assigned schools. Of this time, four hours were devoted to classroom instruction, one hour to

conference and professional time, and the remainder to lunch and pre-class preparation.

Students in the program had to meet the dual eligibility criteria of residence in a target attendance area (Federal Regulations--United States Office of Education, 11/28/68, section 116.17d), and a level of educational achievement below minimum grade level competency.

These primary target group students were identified through a Title I Eligibility Survey conducted under the supervision of the New York City Board of Education by Applied Urbanetics, Inc. Children selected for Corrective Reading were required to understand the English Language. The competency of entering first graders, in schools where principals elected to include first graders in the program, was determined by a total score of below 24, or a letter rating of E on the Metropolitan Readiness tests, Form A or B.

Children in grades two through twelve were given appropriate standardized tests to determine their needs in the program. Minimum levels of competency for eligibility, and specific tests to be used in determining competency were clearly outlined in internal communications from the coordinator of the program to the Title I reading teachers. Assessment of pupil reading performance for placement within reading groups was completed on or before October 4, 1974. The groups, usually of from five to ten pupils, met regularly from this date until the second or third week in June, depending upon the category of private school involved. Corrective Reading

sessions were from 45 to 60 minutes in length, conducted twice per week per student.

Emphasis in the selection process was placed on students between grades one and six, although students above that level who showed significant retardation were given service. The final selection of pupils was determined by cooperative effort of principals and teachers of the nonpublic schools, and Title I teachers. First priority was given to those children whose reading needs were greatest.

In addition to remediation in the basic skills of reading and mathematics, the overall umbrella Nonpublic School program provided the following supportive services: Clinical Guidance; Speech Therapy; Homework Help. Students were required to be enrolled in one of the basic skills components in order to qualify for assistance in the supportive services components. According to need, a student could receive assistance from all of the three supportive service components. One other supportive service was connected to the Corrective Reading program, namely, that of paraprofessional assistance provided by the decentralized local school districts. A total of 107 paraprofessionals worked with the Corrective Reading teachers.

## Chapter II

### EVALUATIVE PROCEDURES

The Corrective Reading Services Component in the umbrella Nonpublic Schools program was designed to supplement the regular reading program in these schools in order to raise the reading achievement levels of educationally deprived children in grades one through twelve, reading one or more years below grade level.

The two basic evaluation objectives of this report were: a) Analysis of the implementation of the program in accordance with funding proposal guidelines; b) Analysis of pupil reading achievement on standardized tests.

### IMPLEMENTATION

Implementation aspects of the Corrective Reading program were evaluated through a series of observations of classrooms of the program in operation. Twenty schools were visited, and the work of 23 teachers and their students were evaluated. Each of the schools was visited twice, once during the winter and once in the early spring. The number of schools in this sample constituted slightly less than ten percent of all schools serviced by the program.

The description of the Corrective Reading Services component as described in the document, Evaluation Design, 1974-1975, Nonpublic Schools Program #09-59625, (Board of Education of the City of New York, Office of Educational Evaluation, July, 1974), constituted a guide for these



evaluative observations. The Corrective Reading Services component was described as follows:

"Approximately 15,180 pupils will be served by this component. Licensed Board of Education teachers will be assigned to conduct corrective reading sessions for small groups of children in the nonpublic schools. Standardized diagnostic reading tests will be administered. From the results of these tests, the corrective reading teachers will diagnose the needs of the children and prescribe individualized programs to meet these needs. The corrective reading classes will be visited by field supervisors and the coordinator acting as resource reading specialists to aid and supervise the corrective reading teachers. Teaching approaches will be varied and materials of instruction will be geared to meet the needs of the pupils."

During each observation visit, two procedures were followed: a) the principal of the school was invited to discuss the program with the evaluator; b) actual classroom situations were compared with the above description of what was to be taking place. In addition, interviews were held with the coordinator, two field supervisors, the teachers and paraprofessionals in the schools visited. One training session, conducted by a field supervisor for a small group of teachers, was observed.

#### READING ACHIEVEMENT RESULTS

Objective: To determine whether as a result of participation in the Corrective Reading component in the Non-public schools program, the reading achievement scores of the students will show a statistically significant improvement, using the real posttest score and the anticipated posttest score.

The evaluation design for grades two to twelve, prescribed the statistical technique of analysis of variance for repeated measures to compare real posttest scores with anticipated post-

test scores. In addition, since the pupil participants may have received services provided by other supportive components, the same analysis of variance design was used to determine whether the various supportive components had contributed to reading achievement. Consequently, analyses per grade were to be conducted for each of the five reading achievement tests administered in the program using the following supportive component categories: (1) Corrective Reading only; (2) Corrective Reading and Clinical Guidance; (3) Corrective Reading and Speech Therapy; (4) Corrective Reading and Homework Helper; (5) Corrective Reading and two or more other supportive components. The final data analysis was conducted on four instead of five supportive component categories because the category 'Corrective Reading and Homework Helper' involved a very small number of pupils with some grade levels having empty cells.

The evaluation design for grade one required that the real posttest scores be compared with the pretest scores instead of with the anticipated posttest scores since these pupils had not been in school long enough to develop a predicted post-test score.

The statistical analyses of reading achievement were to be conducted on all the pupil participants of the program. The standardized reading achievement tests selected were administered according to pupil achievement level within a grade. The tests administered were: Grade One - Metropolitan Reading Readiness Test or Stanford Achievement Test Level I; Grade Two - Stanford Achievement Test Level I; Grade Three - Stanford

Achievement Test Level I or Stanford Diagnostic Test Level I; Grade Four - Stanford Diagnostic Test Level I; Grades Five to Eight - Stanford Diagnostic Test Level I or Stanford Diagnostic Test Level II; Grades Nine to Twelve - Iowa Silent Reading Test Level II.

The Reading Comprehension score was used in the statistical analyses of all the tests with the exception of the Metropolitan Reading Readiness Test for which the Total reading score was used. The Total Reading Score was analyzed in raw score form whereas the scores of the other four tests were analyzed in grade equivalent form. The testing schedule for the school year 1974-75 consisted of the preprogram measure being administered in the fall of 1974 and the postprogram measure being administered in the spring of 1975. For students who continued in the program from the previous year, the posttest score of the year 1973-1974 was used as the pretest score for the year 1974-75.

An addendum to the evaluation design was included to consider the impact or contribution of **paraprofessional supportive assistance** to pupil reading achievement. This addendum was contained in a letter sent by Mr. Wayne Williams (Office of Evaluation) to Mr. Leo W. Rausch (N.Y. State Education Department), dated July 25, 1974, stating that the above described question would be analyzed "where such services are deemed to be continuous and substantial throughout the academic year."\* The evaluative procedures to be utilized involved a comparison of the data collected with the specified criteria of "continuous" and "substantial" services.

\*See "Evaluation Design" cited on page 4 of this report.

## Chapter III

### FINDINGS

The two basic evaluation objectives investigated in this report were: a) the extent to which the Corrective Reading Services component had been implemented in accordance with funding proposal guidelines, and b) whether pupil reading achievement, as measured by standardized tests, improved significantly over the school year 1974-1975.

### IMPLEMENTATION

#### Selection and Testing Procedures

Special efforts were made to determine if eligibility lists were being adhered to. Results of this inquiry were positive. Further, the field supervisors regularly checked on the accuracy of student registers. These student lists were up-to-date at the time of the evaluative visits. The total number of the students in the program, in all schools, had originally been estimated at 15,180. Eventually, the number was reduced to 13,769. This reduction was due to requests from a number of schools for more concentrated reading services for smaller numbers of children.

The standardized reading tests required for diagnostic and evaluative purposes were administered on schedule and in accordance with proposal guidelines. Pupil tests were hand-scored by the corrective reading teachers themselves, upon the recommendation of the previous evaluator, in order to save time and money. In the opinion of the current evaluators,

economies pertaining to scoring time and scoring costs, while important considerations, are only secondary to the accuracy criterion essential for valid diagnosis and valid evaluation.

#### Supervision of the Program

The coordinator of the program was easily accessible for evaluative conferences and provided all necessary records of the Corrective Reading Services component. The coordinator fulfilled the function of resource reading specialist in numerous ways, including monthly visits to the schools to observe teachers, establishing a resource center consisting of books and materials used in the program, and holding conferences for groups of teachers. The coordinator provided knowledgeable and sympathetic professional leadership for the teachers and field supervisors as well as a smooth and extensive communication system with all program personnel and those in related supportive functions.

The field supervisors were readily available when needed. Their visits were noted regularly on the Title I personnel attendance sheets of the schools observed. Immediate assistance was available for teachers through the office of the coordinator where telephone contact was possible before, during, and after the school day.

The supervisors conducted local, on-going, in-service training which supplemented the training sessions conducted periodically by the coordinator for all teachers of the program. This training was not stratified according to experience of the teachers, as recommended in the previous evaluation report.

Training sessions appeared to be determined more by geography than by experience level, a fact which was quite practical, and certainly not deleterious to the utility of the sessions.

The supervisors, in general, were an effective unit within the total program and demonstrated experience, knowledge, and sensitivity to the needs of children and teachers.

An assistant to the coordinator was assigned in compliance with the recommendation of the previous evaluation report, to work under the supervision of the coordinator. The assistant to the coordinator directed the acquisition and delivery of instructional materials for the schools in the program, which undoubtedly contributed to the high efficiency of the program.

#### Teachers

In the sample of 20 schools visited, 23 teachers were observed. These teachers were all licensed by the New York City Board of Education. A spot check of the coordinator's records indicated that copies of the teachers' licenses were on file. All the teachers visited had had public school teaching experience prior to entering the Corrective Reading program. The education levels varied, with 16 of the 23 teachers interviewed holding a masters degree. All the teachers had completed appropriate levels of course work in the teaching of reading.

The teachers, in general, were pleasant, professional, and notably positive in attitude in dealing with students. They worked tactfully and cooperatively in dealing with the principals and other teachers of the host schools. Principals were generally satisfied with the level of performance of the teachers of the program.

### Instructional Program

Instructional time varied from one school to another. Classes ranged in length from 45 to 60 minutes. The large majority of students met twice weekly for their Corrective Reading classes.

The instructional methods used by each teacher were extremely varied. Fundamentally, the teaching was geared to meeting the needs of individuals. The results of student testing were used to provide diagnosis of the needs of the children. Teachers prescribed individualized reading programs as called for in the funding proposal. Teachers maintained current files on the progress of individual children. Children were rewarded positively for their accomplishments, both small and large.

Teachers devoted time to word identification and vocabulary development. Skills were developed both in group and in individual settings. Application was made of phonics analysis in the word identification process. Special attention was given to development of vocabulary which was related to other subject areas. Comprehension skills were similarly developed. Students were trained in recognition of main ideas, drawing inferences, and discriminating between fact and opinion in written material. Time was also devoted by the teachers to sequencing of ideas in a story and to the importance of punctuation.

Work-study habits were emphasized. Students were taught the organization of a book, and the use of each of its various parts. They were taught to locate information and to follow



printed directions. Scanning and skimming of textual materials were also taught.

In accordance with a recommendation contained in the previous year's evaluation report, first grade classroom teachers referred pupils in need of additional readiness experience to the corrective reading teachers for formal diagnosis and prescriptive readiness experiences.

Paraprofessionals were not present in the majority of the classrooms observed. Where they were in attendance, they provided useful supportive services for the teachers, performing instructional tasks as assigned by the teachers, as well as a number of purely mechanical and clerical details, which thus provided the teachers more time for instruction. Teachers and supervisors provided on the job training for the paraprofessionals. In accordance with a recommendation contained in the previous year's evaluation, the coordinator also organized training sessions for paraprofessionals upon request by individual local school districts.

#### Materials and Facilities

There were abundant printed materials available to the classes. Books in paper and hard-cover editions, as well as expendable materials were constantly being added to the already adequate libraries in each of the classrooms. Audio and visual materials had good distribution throughout the schools. Most schools were equipped with the following: tape recorder, Language Master, Microfiche, and Rexograph machine. Since the students were eager to use the reading machines,



teachers were able to use the machines as an additional means of reward. In no case was the use of machines substituted for the basic function of the teacher.

In the limited time spent in each school evaluation, it was noted that teachers showed some preference for one machine over another. Different machines had greater utility for different teachers.

Facilities provided by the host schools were generally good. In cases where the rooms were small, they nevertheless represented more than a fair share of the school's limited resources.

## READING ACHIEVEMENT RESULTS

The Corrective Reading Services component was designed to achieve a statistically significant increase in pupil reading achievement over the period of the school year 1974-1975. A two-way analysis of variance for repeated measures was used to test the significance of differences between real and anticipated posttest scores within the four component categories of: Corrective Reading; Corrective Reading and Clinical Guidance; Corrective Reading and Speech Therapy; and Corrective Reading and Two or More Supportive Services Components.

Examination of the analysis of variance results presented in Table I revealed highly significant differences between real and anticipated posttest reading comprehension scores at all grade levels with the exception of grades ten and twelve. (See also Appendix A for MIR tables.) Since the analysis of variance computed was a two-way design, the significant mean differences reported between real and posttest scores occurred within all of the four component categories utilized in the analysis.

Mean gains between pretest and posttest scores were obtained by 12 out of 18 grade-test type categories ranging from six months to 15 months for the school year. Ten of the 12 grade levels involved reported mean gains of seven months or more thus earning exemplary program status. The exemplary program status was calculated to be seven months gain for seven months of program treatment, namely, the duration between pretest and posttest administrations. At grade one on the Metropolitan Readiness Test the mean was 40.0 raw score points

Table I

Analysis of Variance of Reading Achievement  
Using Real Versus Anticipated Posttest Scores

Grade	Test	N	Source	Mean Squares	df	F Ratio
One	Metropolitan Readiness Test	416	Pretest vs. Posttest Interaction	2356.662 4.492	1 3	3102.771*** 5.914***
One	Stanford Achievement Test Primary Level I	143	Pretest vs. Posttest Interaction	50.640 .202	1 3	223.629*** .891
Two	Stanford Achievement Test Primary Level I	1773	Real vs. Anticipated Interaction	835.909 2.224	1 3	2058.131*** 5.475***
Three	Stanford Achievement Test Primary Level I	691	Real vs. Anticipated Interaction	69.380 0.550	1 3	198.736*** 1.589
Three	Stanford Diagnostic Test Level I	1359	Real vs. Anticipated Interaction	72.349 .133	1 3	502.430*** .926
Four	Stanford Diagnostic Test Level I	1833	Real vs. Anticipated Interaction	22.468 .520	1 3	110.141*** 2.547
Five	Stanford Diagnostic Test Level I	867	Real vs. Anticipated Interaction	12.712 0.731	1 3	58.825*** 3.385*
Five	Stanford Diagnostic Test Level II	941	Real vs. Anticipated Interaction	190.089 .289	1 3	410.948*** 0.624

Note 1: Interaction refers to the combined effects of component categories, Corrective Reading only, Corrective Reading and Clinical Guidance, Corrective Reading and Speech Therapy, Corrective Reading and Two or More Supportive Components, and Real vs. Anticipated Posttest scores.

Note 2: Analysis of Variance for Grade One involved Pretest vs. Posttest scores rather than Real vs. Anticipated Posttest Scores. Interaction for this grade referred to the combined effects of the above described component categories and Pretest vs. Posttest scores

Table I (cont.)

Grade	Test	N	Source	Mean Squares	df	F Ratio
Six	Stanford Diagnostic Test Level I	344	Real vs. Anticipated Interaction	6.374 .113	1 3	24.301*** .431
Six	Stanford Diagnostic Test Level II	1609	Real vs. Anticipated Interaction	202.981 1.902	1 3	406.133*** 3.805**
Seven	Stanford Diagnostic Test Level I	100	Real vs. Anticipated Interaction	2.186 .156	1 3	8.310** .591
Seven	Stanford Diagnostic Test Level II	1178	Real vs. Anticipated Interaction	94.833 1.161	1 3	106.848*** 1.309
Eight	Stanford Diagnostic Test Level I	21	Real vs. Anticipated Interaction	No value could be computed due to empty cells for two component categories,		
Eight	Stanford Diagnostic Test Level II	768	Real vs. Anticipated Interaction	54.719 .552	1 3	40.721*** .411
Nine	Iowa Silent Reading Test	278	Real vs. Anticipated Interaction	45.951 2.118	1 3	35.687*** 1.645
Ten	Iowa Silent Reading Test	167	Real vs. Anticipated Interaction	3.915 .554	1 3	3.762 .532
Eleven	Iowa Silent Reading Test	90	Real vs. Anticipated Interaction	14.582 .960	1 3	11.055** .728
Twelve	Iowa Silent Reading Test	64	Real vs. Anticipated Interaction	3.332 .881	1 3	3.390 1.040

\*\*\*Significant beyond the .001 level.

\*\*Significant beyond the .01 level.

\*Significant beyond the .05 level.

corresponding to a letter rating gain from E to D level.

Significant F ratios for the Interaction factor reported in Table I for the following grade levels, one (Metropolitan Readiness Test), two (Stanford Reading Achievement Test), five (Stanford Diagnostic Reading Test Level I) and six (Stanford Diagnostic Reading Test Level II), suggested the need for further analysis of the mean differences involved. The Interaction factor comprised the product of mean differences of component categories and the mean differences between real and anticipated posttest scores for the same component categories, within a particular test-type-grade level. The Scheffé Post Hoc Test of Mean Differences was used to investigate the significance of the mean differences between four component categories. The results are reported in Table II.

A comparison of the component category means for anticipated and real posttest scores with computed Scheffé values revealed no consistent pattern of differences between the components at the four grade levels involved. The specific variations obtained are presented within grade levels. Grades One and Two (1) The components, Corrective Reading Only (CR), Corrective Reading and Clinical Guidance (CROG), and Corrective Reading and Speech Therapy (CRST), entered the program at comparable levels as demonstrated by the anticipated posttest means. (2) On the real posttest, CR scored significantly higher than CROG and Corrective Reading and Two or More Components (CR&TorM). (3) CRST scored the second highest among the components on the real posttest at grade levels one and two and

Table II

Computed Scheffé Values for Component Anticipated and Real Posttest Means Per Grade and Test Type

Grade and Test Type	Mean Type	COMPONENT CATEGORIES								Scheffé Values  Levels 001      .01	
		Corrective Reading Only		Corrective Reading and Clinical Guidance		Corrective Reading and Speech Therapy		Corrective Reading And Two or More Supportive Components			
		N	Mean	N	Mean	N	Mean	N	Mean		
Grade One MRT	Anticipated	232	20.62	67	20.39	69	21.49	48	19.27	5.80	4.85
	Real	232	64.80	67	58.03	69	63.29	48	56.02		
Grade Two SRAT Primary I	Anticipated	764	1.24	319	1.23	350	1.15	340	1.06	.183	.153
	Real	764	2.35	319	2.11	350	2.24	340	2.13		
Grade Five SDRT Level I	Anticipated	440	3.03	213	2.78	83	2.83	131	2.70	.216	.180
	Real	440	3.21	213	2.99	83	3.16	131	2.79		
Grade Six SDRT Level II	Anticipated	870	3.91	429	3.66	132	3.68	178	3.76	.260	.217
	Real	870	4.65	429	4.34	132	4.32	178	4.23		

significantly higher than CROG and CR&TorM) at grade one.

Grades Five and Six (1) The components, CR, CROG, and CRST did not enter the program at comparable levels as demonstrated by the anticipated posttest means, with the CR component scoring significantly higher than the CROG and CRST components. (2) On the real posttest, CR scored significantly higher than CROG, and CR&TorM components. (3) CR scored significantly higher on the real posttest than CRST at grade six, whereas CRST scored significantly higher than CR at grade five.

A criterion reference analysis was conducted on grade one scores on the Metropolitan Readiness Test. The selected criterion required that 95 per cent of the population involved would increase from a D or E rating on the pretest to the next highest letter rating on the posttest. An examination of the data revealed that the Corrective Reading Services component scored far beyond criterion expectations. Specifically, the population was comprised of 416 pupils, 373 (89.7%) scoring an E rating and 43 (10.3%) scoring a D rating on the pretest. The posttest scores showed 402 out of the total 416 pupils, that is, 96.6% of the population, improving in reading achievement to the extent of moving up one or more letter ratings. The pupils moved to either D, C, B or A ratings. The fact that Grade One data analysis, whether norm referenced or criterion referenced, showed sizeable achievement gains, forebodes well for the future.

Concerning the effect or impact of paraprofessional supportiveservices upon pupil achievement, several complic-

ations were experienced. Analysis of the data indicated that only 32.2 per cent of the program pupils had been in classes serviced by paraprofessionals. Further, in these classes, wide variations in terms of type and degree of paraprofessional assistance rendered were recorded. Some paraprofessionals provided individual tutorial instruction as well as clerical supportive services for the teacher, whereas some paraprofessionals were engaged almost exclusively in clerical supportive assignments. Consequently the reported paraprofessional assistance in the Corrective Reading Services component was evaluated to be neither "continuous" nor "substantial".



## Chapter IV

### SUMMARY OF MAJOR FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### Major Findings

1. In considering the implementation aspects of the program, it was found that the program was well within the limits established by the funding proposal. The instructional program observed was of high quality. Standards were clearly stated and the administrative and supervisory staff worked closely with the teachers and paraprofessionals of the Corrective Reading Services component to provide an exemplary reading program.

Some of the principal implementation findings were:

A. There was a highly individualized, diagnostic-prescriptive model of instruction in the area of corrective reading. This individualized instruction took place in a setting of uniformly small groups of students.

B. There were efficient procedures for the supervision of teachers.

C. The teacher training program was excellent. This program of training included guest speakers whose talks broadened the outlook of teachers to include related areas such as linguistics, English as a second language, language development, learning disabilities, and other topics related to the central theme of reading.

D. Abundant, new, and exciting materials were constantly being added to the classroom libraries.

E. The coordinator had established an effective

system of communication between the coordinator's office and personnel in the Corrective Reading Services program.

F. Teachers were free to use many methods in their work with children. They were encouraged to adapt themselves to the needs of pupils.

G. Teachers used a system of frequent rewards for the children, thus developing in them an evident like for reading.

2. Outstanding results in the area of reading achievement characterized the pupils in the Corrective Reading Services component, thereby meriting exemplary program status.

A. Comparisons between anticipated posttest scores on standardized reading tests showed pupil achievement to be significantly higher than anticipated for all grades with the exception of grades 10 and 12.

B. Mean gains from pretest to posttest exceeded seven months or more, for 10 out of 18 grade-test type categories.

C. Comparisons between component anticipated and real posttest means with computed Scheffe values revealed the absence of any consistent pattern of significant gain for any component category.

D. The program achieved above the selected criterion level for grade one on the Metropolitan Readiness test.

E. Paraprofessional **supportive** services were administered to only one-third of the pupil population. Wide variations in terms of type and degree of services rendered, resulted in the evaluation that the services were neither "continuous"

nor "substantial".

### Conclusions and Recommendations

The Corrective Reading Services component of the Nonpublic School umbrella program attempted to improve the reading achievement level of educationally deprived pupils in grades one through twelve.

Investigation of the extent to which the component program had been implemented according to proposal guidelines revealed a high degree of correspondence while the area of pupil achievement in reading revealed outstanding performance on the whole, the only exception being grades 10 and 12.

The following recommendations are designed to endorse the positive features already in operation and to suggest changes for features or practices that are considered questionable.

1. Because of the program's observed instructional effectiveness and outstanding pupil achievement in reading, the Corrective Reading Services component of the Nonpublic School program should be recycled for the 1975-1976 school year.
2. Expand and extend the program to include the Title I eligible pupils currently excluded.
3. Expenditures for materials and supplies should be continued at the proportional levels observed in the operation of the program during the 1974-1975 school year.
4. The major function of the assistant to the coordinator was the distribution of educational supplies and equip-

ment. Continuation of this position would insure efficient distribution essential to the conduct of a sound educational program.

5. Teacher preferences should be considered with regard to the selection of equipment to be allocated to a particular school.

6. Pupil achievement on standardized tests to be machine rather than hand scored by program personnel in order to minimize scoring errors and to maintain objective assessment procedures.

LIST OF APPENDICES

A. MIR Form	A1
B. Exemplary Program Abstract	B1
C. Data Loss Form	C1

Function No. 09-59626

Use Table 30A. for Historical Regression Design (6-Step Formula) for Reading (English); Math (English); Reading (Non-English); Math (Non-English).

## 30A. Standardized Test Results.

In the Table below, enter the requested information about the tests used to evaluate the effectiveness of major project components/activities in achieving desired objectives. This form requires means obtained from scores in the form of grade equivalent units as processed by the 6 step formula (see District Evaluator's Handbook of Selected Evaluation Procedures, p. 45-49). Before completing this table, read all footnotes. Attach additional sheets if necessary.

[49]

Component Code	Activity Code	Test Used <sup>1/</sup>	Form		Level		Total N <sup>2/</sup>	Group I.D. <sup>3/</sup>	Number Tested <sup>4/</sup>	Pretest		Predicted Posttest Mean	Actual Posttest		Statistical Data	
			Pre	Post	Pre	Post				Date	Mean		Date	Mean	Obtained Value of F	Level of significance
60823720	MRT-66	A	B	-	-	457	1st	416	9/74	20.44	—	4/75	60.53	3102.77	≤ .001	*
60823720	SRAT-74	A	B	Primary Level I	I	143	1st	143	9/74	.79	—	4/75	1.76	223.63	≤ .001	*
60823720	SRAT-74	A	B	Primary Level I	I	1966	2nd	1773	9/74	1.11	1.17	4/75	2.21	2058.13	≤ .001	
60823720	SRAT-74	A	B	Primary Level I	I	750	3rd	691	9/74	1.81	2.14	4/75	2.62	198.74	≤ .001	
60823720	SDRT-66	W	X	I	I	1516	3rd	1359	9/74	1.91	2.19	4/75	2.55	502.43	≤ .001	
60824720	SDRT-66	W	X	I	I	2063	4th	1833	9/74	2.29	2.60	4/75	2.78	110.14	≤ .001	
60824720	SDRT-66	W	X	I	I	979	5th	864	9/74	2.58	2.83	4/75	3.04	58.83	≤ .001	

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1/ Identify the test used and year of publication (MAT-58, CAT-70, etc.).

2/ Total number of participants in the activity.

3/ Identify the participants by specific grade level (e.g., grade 3, grade 5). Where several grades are combined, enter the last two digits of the component code.

4/ Total number of participants included in the pre and posttest calculations.

5/ Specify level of statistical significance obtained (e.g.,  $p \leq .05$ ;  $p \leq .01$ ).

Note. Unweighted Means Analysis of Variance were conducted for this report.  
\* Analysis of Variance was conducted on Pretest vs Posttest scores.

Function No. 09-59626

Use Table 30A. for Historical Regression Design (6-Step Formula) for Reading (English); Math (English); Reading (Non-English); Math (Non-English).

## 30A. Standardized Test Results.

In the Table below, enter the requested information about the tests used to evaluate the effectiveness of major project components/activities in achieving desired objectives. This form requires means obtained from scores in the form of grade equivalent units as processed by the 6 step formula (see District Evaluator's Handbook of Selected Evaluation Procedures, p. 45-49). Before completing this table, read all footnotes. Attach additional sheets if necessary.

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Component Code	Activity Code	Test Used <sup>1/</sup>	Form		Level		Total N <sup>2/</sup>	Group I.D. <sup>3/</sup>	Number Tested <sup>4/</sup>	Pretest		Predicted Posttest Mean	Actual Posttest		Statistical Data	
			Pre	Post	Pre	Post				Date	Mean		Date	Mean	Obtained Value of F	Level of significance
60824720		SDRT-66 W	X		II	II	970	5 <sup>5/</sup>	941	9/74	2.92	3.23	4/75	3.99	410.75	≤ .001
60824720		SDRT-66 W	X		I	I	389	6 <sup>5/</sup>	344	9/74	2.78	2.95	4/75	3.21	24.30	≤ .001
60824720		SDRT-66 W	X		II	II	1751	6 <sup>5/</sup>	1609	9/74	3.43	3.75	4/75	4.40	406.13	≤ .001
60825720		SDRT-66 W	X		I	I	100	7 <sup>5/</sup>	100	9/74	2.90	2.99	4/75	3.29	8.31	≤ .01
60825720		SDRT-66 W	X		II	II	1318	7 <sup>5/</sup>	1178	9/74	4.01	4.33	4/75	4.45	106.85	≤ .001
60825720		SDRT-66 W	X		I	I	21	8 <sup>5/</sup>	21	9/74	—	—	4/75	—	—	—
60825720		SDRT-66 W	X		II	II	776	8 <sup>5/</sup>	768	9/74	4.55	4.83	4/75	5.42	40.72	≤ .001

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See Note\*

1/ Identify the test used and year of publication (MAT-58, CAT-70, etc.).

2/ Total number of participants in the activity.

3/ Identify the participants by specific grade level (e.g., grade 3, grade 5). Where several grades are combined, enter the last two digits of the component code.

4/ Total number of participants included in the pre and posttest calculations.

5/ Specify level of statistical significance obtained (e.g.,  $p \leq .05$ ;  $p \leq .01$ ).

\*Note. No value could be computed due to empty cells for two component categories

## Function No. 09-59626

Use Table 30A. for Historical Regression Design (6-Step Formula) for Reading (English); Math (English); Reading (Non-English); Math (Non-English).

## 30A. Standardized Test Results.

In the Table below, enter the requested information about the tests used to evaluate the effectiveness of major project components/activities in achieving desired objectives. This form requires means obtained from scores in the form of grade equivalent units as processed by the 6 step formula (see District Evaluator's Handbook of Selected Evaluation Procedures, p. 45-49). Before completing this table, read all footnotes. Attach additional sheets if necessary.

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Component Code				Activity Code				Test Used <sup>1/</sup>	Form		Level		Total N <sup>2/</sup>	Group I.D. <sup>3/</sup>	Number Tested <sup>4/</sup>	Pretest		Predicted Posttest Mean	Actual Posttest		Statistical Data	
									Pre	Post	Pre	Post				Date	Mean		Date	Mean	Obtained Value of F	Level <sup>5/</sup> of significance
6	0	8	2	5	7	2	0	ISRT-73	E	F	II	II	308	9 <sup>th</sup>	278	9/74	4.87	5.27	4/75	6.19	35.69	≤ .001
6	0	8	2	6	7	2	0	ISRT-73	E	F	II	II	228	10 <sup>th</sup>	167	9/74	5.50	5.99	4/75	6.41	3.76	Not Significant
6	0	8	2	6	7	2	0	ISRT-73	E	F	II	II	129	11 <sup>th</sup>	90	9/74	6.18	6.65	4/75	7.73	11.06	≤ .01
6	0	8	2	6	7	2	0	ISRT-73	E	F	II	II	81	12 <sup>th</sup>	64	9/74	7.58	8.32	4/75	8.98	3.93	Not Significant

1/ Identify the test used and year of publication (MAT-58, CAT-70, etc.).

2/ Total number of participants in the activity.

3/ Identify the participants by specific grade level (e.g., grade 3, grade 5). Where several grades are combined, enter the last two digits of the component code.

4/ Total number of participants included in the pre and posttest calculations.

5/ Specify level of statistical significance obtained (e.g.,  $p \leq .05$ ;  $p \leq .01$ ).

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